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Innovativeness Model Of Small And Medium Enterprises Based On Market Orientation and Learning Orientation: Testing Moderating Effect Of Business Operation Mode

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Abstract

Firms tend to perform better when they attempt to focus on market orientation with special emphasis on flexibility and faster response time. The aims of this study is to analyze the interrelationships between market orientation, learning orientation and innovativeness. The effects of business operation mode on learning orientation and innovativeness are also investigated. The study involves a questionnaire-based survey of owners from small-medium sized-firms operating in Banyumas regency. A total of 149 usable questionnaires were received from SMEs. A structural equation model was designed to examine the relationship. Model was tested by Partial Least squares (PLS) analysis. The results show that firm innovativeness positively affects firm performance; firm learning-orientation positively influences firm innovativeness; firm market-orientation positively impacts firm learning orientation; firm learning-orientation mediates the relationship between firm market-orientation and firm innovativeness. The study found that participation moderate the relationship between market orientation and learning orientation on innovativeness.

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Keywords: market orientation; operation mode; innovativeness; learning orientation; SMEs.

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1. Introduction

In the business world, business environment and customer preferences will always have a change to be more dynamic and complex. Each firm is required to survive by making internal changes to anticipate any changes in business and market demands. To deal with the changing business environment and changing customer preferences, many companies introduce the idea of market orientation, which is one of the important developments in marketing studies. Market orientation is a continuum that is characterized by the presence of a level of a firm in acquiring, disseminating, and responding to information obtained from customers, associates, and competitors. The firm will get better performance when the firm is trying to focus on market orientation with specific emphasis on flexibility and faster response time (Baker and Sinkula, 1999; Hardley and Mavondo, 2000; Noble et al, 2002; Benito et al. , 2009).

Several previous studies indicate that market orientation (Narver and Slater, 1990; Jaworski and Kohli, 1993), learning orientation (Sinkula, 1994; Narver and Slater, 1995) have an influence on the Firm's innovativeness. Hurley (2003) finds the relationship between the two antecedents (market orientation, learning orientation) on Firm's innovativeness. Market orientation is firm's attempt to always produce the products / services in accordance with the needs of the market/consumers. Market orientation will encourage companies to innovate at all times. Innovation Process in a firm closely associated with the learning process that develops in the firm.

Firm learning-orientation not only receive and disseminate information about the market or take advantage of market-based knowledge to find new ways to serve customers, but also continue to explore the dynamics of the market (Lin et al., 2008. Hardley and Mavondo (2000) argued that learning orientation have a significant and positive impact on customer orientation and competitor orientation. Keskin (2006) suggests that a business to maximize its ability to learn about the market and create market orientation is an early stage in developing its internal innovation. This condition indicates that learning orientation mediates the relationship between market orientation and innovativeness (Suliyanto and Rahab, 2012). Thereby, the level of learning orientation plays a role in influencing the relationship between market orientation and innovativeness.

Farrell (2000) argued that learning orientation is a source of firm's competitive advantage. Firm should facilitate organizational learning as the highest priority in management practices. However, the question arises whether a specific management practices and behaviors can facilitate the learning orientation and market orientation. Can the market orientation facilitates the learning orientation? Is learning strategies can improve the market orientation? The whole questions of research are yet to be clearly answered and require further research.

In addition, market orientation and learning orientation plays a role in the practices of Firm's innovativeness dimensions. The success of the marketing operation based on the ability of Firm to differentiate their products and marketing activities of competitors. Maydeu-Olivares and Lado (2001) argued that innovation is one of the Firm's abilities to create a core value (core value). McGuinness and Morgan (2005) state that market orientation had a positive impact on the organization innovativeness. Based on these preliminary findings, the question arises; (1) Is firm market-orientation will be able to develop the learning environment? (2) Does firm market-orientation can introduce innovativeness activity in the Firm? (3) Does market-oriented Firm achieve its innovativeness through organizational learning? Therefore, this study attempts to explain the relationship between market orientation and firm innovativeness learning orientation role in mediating the relationship between market orientation and innovativeness.

Furthermore, Hurley and Hult (1998) argued that the mode of operation of a business has a major influence on learning orientation and firm's innovativeness. Level of openness and involvement in decision-making will facilitate employees' commitment to innovation. The level of sharing information and resources will increase the acceptance of new ideas and reduce the power of certain groups, politics and status, which could hinder the process of innovation within the firm (Lee and Tsai, 2005). Level of support and collaboration will reduce

employees' fears in the creating and encouraging the emergence of new ideas and courage in taking risks in the firm. Lee and Tsai (2005) state that participated-communication in an organization has an important role in encouraging the internalization of market orientation and organizational learning in achieving organizational innovativeness. However, the questions arise, whether the mode of operation of the firm affects market orientation, learning orientation, and innovativeness. Is there any interaction between market orientation, learning orientation, and mode of operation that will impact on Firm's innovation?

2. Hypotheses Development and Research Model

2.1. The linkage between market orientation, learning orientation, and innovativeness

With the dynamic changes of managerial environment, innovativeness capacity is considered as one of the important factors that have an impact on business performance (Hult et al., 2004). This indicates that the firm which implements innovations will result in higher performance in product development, the renovation process, and the flexibility and responsiveness. Hult et al. (2004) argued that the Firm's competitive advantage can be built by the firm's market orientation, the learning orientation and innovativeness. However, few studies have focused on testing the relationship between these constructs.

Related to the relationship between market orientation and innovativeness, Jaworski and Kohli (1993) argued that market orientation essentially involves something new or something different in response to market conditions. This can be called as a form of innovativeness behavior. Han et al., (1998) and Hurley and Hult (1998) state that innovativeness and the success of new product are the result of which is driven by market demands. Han et al., (1998) and Hurley and Hult (1998) argued that innovativeness as a source for business success was built of ongoing intelligence gathering and decision making. Kitchell (1995) reported that proactive information retrieval will result in organizational innovativeness. Slater and Narver (1994) argued that innovation as a core value in creating capabilities that stimulates market orientation and performance. Henard and Szymanski (2001) found that market orientation contributes to promote the success of new products. Suliyanto and Rahab (2012) found that no significant effect between market orientation and organizational learning in small and medium enterprise's innovativeness.

Related to the relationship between learning orientation and innovativeness, Dickson (1996) suggested that an excellent learning environment in an organization will exploit of all resources, including activities that market orientation and innovation. Mullen and Lyles (1993) also suggested that the sustained orientation towards organizational learning will improve the efficiency and effectiveness of the innovative activities of the firm. Firm must ensure the employee to continue absorbing new knowledge, and maintaining an internal eminent knowledge management system, because knowledge is the key that combines organizational learning and innovative activities. Rahab and Sudjono (2012) found a significant effect between market orientation and organizational learning in small business innovativeness.

Related to the relationship between learning orientation and market orientation, learning orientation concept refers to the ability of organizations to oppose the old assumptions about the market, while the market orientation refers to the organization's focus on environmental events that may affect their ability to maximize customer satisfaction (Hardley and Mavondo, 2000). The main difference between these two concepts is that learning orientation is not only using market-based knowledge to promote customer satisfaction (Lee and Tsai, 2005). Dodgson (1993) argued that learning orientation can facilitate the firm to respond effectively to external changes, such as customer preferences, and technology products. Improved learning ability will allow the organization to absorb and assimilate new ideas (Cohen and Levinthal, 1990). Hurley and Hult (1998) viewed that learning orientation as a "precursor" to build a culture that is receptive to innovation.

Farrell (2000) and Slater and Narver (1995) stated that the market-oriented organization will provide a cultural framework that encourages learning orientation can be developed. Baker and Sinkula (1999) argued

that market orientation will facilitate an adaptive learning in an organization. On the other situations, Day (1994) argued that organizational learning is the basis of the emergence of market orientation, because market-based approach can only arise if the firm is capable of "learning to learn" about the market. Bell et al., (2002) suggested that organizational learning and market orientation are dependent and connected to each other synergistically. Based on these discussions, following research hypotheses are developed:

- H1: Market orientation positively affects the learning orientation.
- H2: Market orientation positively affects the innovativeness.
- H3: Learning orientation positively affects the innovativeness.

2.2. Moderating Effects of Business Operation Mode

The effects of business operation mode on market orientation, learning orientation, and innovativeness had become a major concern of some of the literature (Brown and Eisenhardt, 1995; Hurley and Hult, 1998; Wu et al, 2004a; Wu et al., 2004b). According to Brown and Eisenhardt (1995), the style of participatory communication in business operations is critical for companies to get innovation. Dougherty (1992) suggested that participatory communication will increase the amount of information directly. In addition, communication is useful in building the teamwork to overcome various barriers to communicate among members of the organization. This communication will reduce misunderstandings and barriers to the exchange of information so that the speed and productivity will improve business operations. Brown and Eisenhardt (1995) argued that when team members communicate quite often, they develop absorptive capacity more likely so that they become more efficient in acquiring and using information. This absorptive capacity will also increase productivity and speed of new product development.

In addition, the support and collaboration between employees is critical to the successful development of innovative products and firm's innovativeness. According to Brown and Eisenhardt (1995), support by delegating authority to the employee is important to obtain the resources necessary to encourage teamwork. Hurley and Hult (1998) also suggest that support and granting authority to the employee will reduce the doubt in making creative decisions, thereby encouraging the emergence of new ideas and courage in making business decisions. Support from senior management will also give a positive signal to employees that they are appreciated by their boss. Those conditions will encourage employees to have concern about the firm's innovativeness. Based on these discussions, it can be concluded early that the mode of communication of the Firm will have an impact on market orientation, learning orientation, and firm's innovativeness. That Preliminary conclusion is relevant when a firm uses the appropriate mode of communication that leads to market orientation, learning orientation and innovation capacity. Based on these studies, the hypotheses are developed as follows:

- H4: The firm will achieve market orientation, learning orientation and innovativeness at higher level when firm operates using participatory communication type.
- H5: The firm will achieve market orientation, learning orientation and innovativeness at a higher level when the firm operates using a type of power distribution management.

2.3. Research model

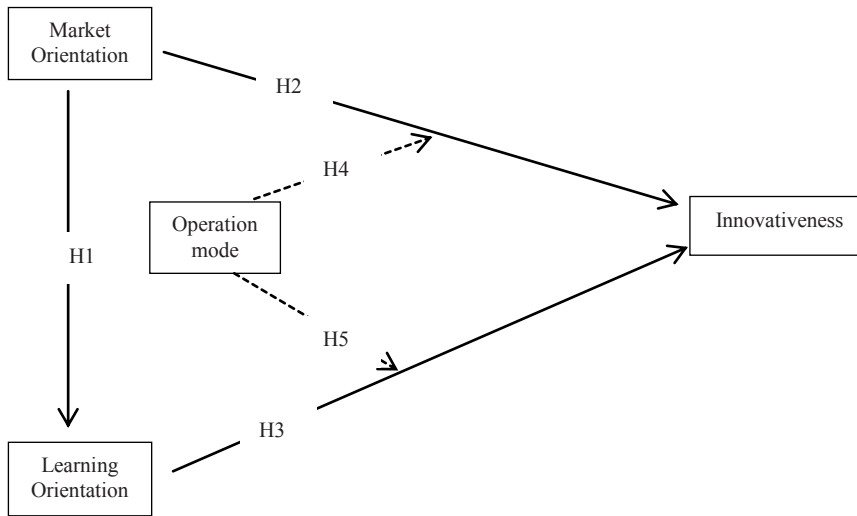


Figure 1. Research Model

3. Research methods

3.1. Research design

The study used a quantitative approach. This study is included confirmatory research, because it starts with a hypothesis or research question involves the proper procedures and specific data sources (Hartono, 2004). The data was collected through surveys. Judging from the dimensions of time, this study is a cross sectional study because it is done only once, at a time (Hartono, 2004). The unit of analysis in this study is firm (Small and Medium Enterprise).

The populations in this study are Small and Medium Enterprises (SMEs) in Banyumas Regency. Method used in the sampling of non-probability sampling with convenience sampling techniques. The numbers of samples to be taken are as many as 149 companies. This amount meets the minimum amount of sample required for data analysis by using the Partial Least Square (PLS) which is about 10 times the number of indicators on the variables that have the most number of indicators on research models (Ghozali, 2006). In this study, variable that has the most number of indicators is market orientation variable as many as 13 indicators. Therefore, the minimum number of samples required for adequate analysis tools are: $10 \times 13 = 130$ samples. The data used in this study was the primary data obtained directly from the source studies (Cooper and Schinder, 2006). Collecting data in the study was conducted using the survey method. Data obtained by sending questionnaires directly the owners of SMEs in Banyumas.

3.2. Operational definition and Measurement

Market orientation is firm orientation related to the effort to follow market sense and consumer needs in process production (Narver and Slater, 1990; Lin et al., 2008). This variable is measured by 15 questions divided into three categories, they are: competitor oriented, consumer oriented and function intern coordination.

Learning orientation is the way of Firm to commit in problem solving systematically (Slater and Narver, 1995; Calantone, 2002; Lin et al, 2008). Innovativeness here means openness mind for new ideas that becomes a part of organization culture related to willingness to run business. This variable was measured by 5 questions adopted from: Calantone et al, 2002; Keskin, 2006 and Lin et al. 2008. Variable measurement instrument used data interval measurement which is refinement of semantic scale that we expect the result is internally scaled data, with the process by putting two extreme categories (Ferdinand, 2005).

3.3. Validity and reliability

Measurement model connected to the instruments' validity was tested by using convergent validity and discriminant validity. Convergent validity assessed by correlation (outer loading) between the score of the item or indicator (component score) with a score of constructs. Convergent validity is used to determine the validity of any association between the constructs (variables) latent. Convergent validity is good if the loading or correlation score with a score of construct indicators above 0.70 (Ghozali, 2006). Based on PLS analysis on Figure 2 (appendiks), outer loading for each indicator of the construct of market orientation (MO), learning orientation (LO), business operation mode (BOM), innovativeness (INOV). Of the visible outer loading loading value of 30 indicators have a value of more than / equal to 0.7. From the table shows all the indicators have met the convergent validity for all values of the above loading greater than 0.70.

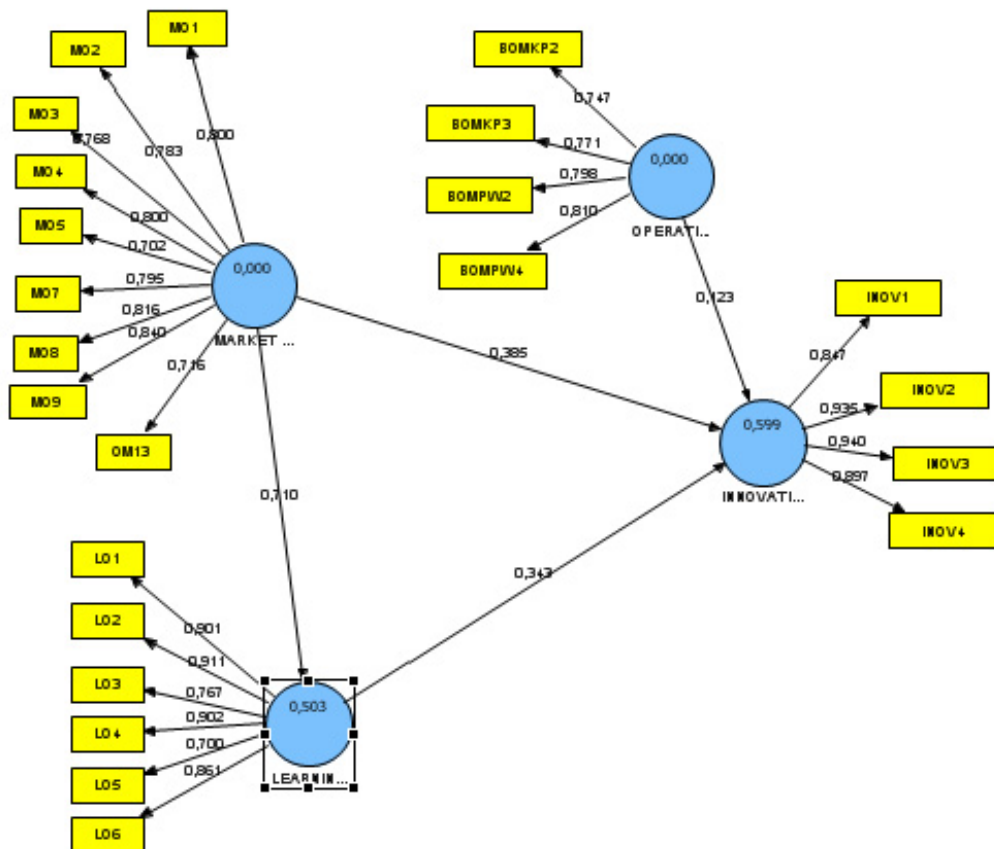


Figure 2. Outer Loading

There are two procedures to measure discriminant validity. The first procedure is that each item in construct must have high loading in construct and the cross loading is lower than item loading in the construct. The second is to compare the AVE square root of each construct and other inter-construct correlation. If the root square value of AVE is higher than the correlation between constructs, it means that the discriminant validity is completed (Fornell and Larcker, 1981). The items that do not have high loading in their construct but they have high loading on other constructs, cannot be used in further analysis. The result of convergent validity can be seen on table 2.

Tabel 1. Cross Loading Score

Indicator	Innovativeness	Learning rientation	Market Orientation	Business Operation Mode
BOMKP2	0,347234	0,531226	0,416501	0,747157
BOMKP3	0,429506	0,551010	0,481296	0,771144
BOMPW2	0,656480	0,608213	0,739738	0,797765
BOMPW4	0,501069	0,548470	0,524798	0,810382
INOV1	0,846665	0,556301	0,568227	0,478138
INOV2	0,935058	0,678242	0,689576	0,599046
INOV3	0,940410	0,690666	0,682909	0,661884
INOV4	0,897169	0,618644	0,650581	0,597809
LO1	0,657154	0,900627	0,638981	0,654803
LO2	0,665035	0,910879	0,686506	0,649060
LO3	0,511635	0,766718	0,465345	0,565634
LO4	0,645414	0,902127	0,731772	0,649814
LO5	0,304836	0,700394	0,443960	0,513529
LO6	0,686312	0,861052	0,559398	0,605794
MO1	0,562323	0,566953	0,800069	0,540017
MO2	0,523218	0,538026	0,782990	0,534784
MO3	0,459971	0,535829	0,768306	0,444860
MO4	0,596933	0,632785	0,799912	0,623676
MO5	0,444454	0,417799	0,701865	0,412565
MO7	0,654115	0,549085	0,794979	0,583190
MO8	0,632465	0,554171	0,815966	0,625166
MO9	0,646374	0,611616	0,839906	0,634898
MO13	0,473675	0,552020	0,715906	0,643891

To find out the discriminate validity, cross loading can be seen. The value of cross loading can be seen on table 2. Table 2 shows both the loading value of item with its measured construct and item with other construct. Loading value in bold shows the loading item with its measured construct. Discriminant validity is fulfilled if the item loading value of the construct is higher than loading value of other construct. By referring to table 2, it can be seen that discriminant validity is fulfilled if item loading value with its measured construct (bold printed) is higher than item loading value of other construct.

Tabel 2. AVE dan AVE-square

Variabel	AVE	Akar AVE
Innovativeness	0,820115	0,905602
Learning Orientation	0,712414	0,839801
Market Orientation	0,610190	0,781146
Operation Mode	0,611514	0,781994

Another technique to measure the discriminant validity is by comparing AVE root square of each construct with the correlation of other construct. Table 3 and table 4 are the value of AVE root square and the correlation of other construct. Based on table 3 and table 4, it can be seen that the value of AVE root square (bold printed) is higher than the correlation between constructs. Hence, by referring to this indicator, discriminant validity is also fulfilled.

Table 3. Latent variable correlations score

	Innovativeness	Learning Orientation	Market Orientation	Operation Mode
Innovativeness	0,905602			
Learning Orientation	0,705265	0,839801		
Market Orientation	0,717866	0,709506	0,781146	
Operation Mode	0,649216	0,720341	0,723434	0,781994

Reliability indicates the stability and consistency of an instrument that measures a construct. Reliability of the instrument is determined from the composite reliability and Cronbach's alpha for each block of indicators. According to Chin in Ghazali (2006), an indicator good reliability if composite reliability values greater than 0.70. According to Nunnally (2006) construct was reliable if the Cronbach's alpha greater than 0.60. Results of Reliability test by the composite reliability and Cronbach's alpha can be seen in table 4.

Table 4. Nilai composite Reliability dan cronbach's alpha.

Variabel	Composite Reliability	Cronbach's alpha
Innovativeness	0,947984	0,926441
Learning Orientation	0,936489	0,917980
Market Orientation	0,933578	0,919839
Operation Mode	0,915903	0,892490

3.4. Hypothesis testing

Hypothesis testing can be done by considering the significance and path parameters among the latent variables. To test the hypothesis, statistical analysis was performed by entering variables tested simultaneously both dependent variables, mediating variables and independent variables. Acceptance or rejection of hypotheses based on the direction of the relationship and significance of the model in question is shown by table 5.

The relationship between market orientation to learning orientation has a beta coefficient= 0,709506, t-statistics= 9,572004, whereas t-table with a significant level of 0.05 by 1.645. This shows that t-count > table, which means that hypothesis 1 are supported. These results indicate that market orientation is significantly positive effect on learning orientation. The relationship between market orientation on innovativeness beta coefficient value= 0, 385133 t-statistics= 2, 353834, while the t-table with a significant level of 0.05 by 1.645. This shows that t-statistics > t-table, which means that hypothesis 2 supported. In this study the influence of market orientation on i variables indicate the direction of a positive influence. It shows that market orientation has an influence on innovativeness. The relationship between learning orientation on innovativeness has a value of beta coefficient= 0, 343071, t statistics= 2, 369576, while the t table with 0,05 significant level of

1,645. This shows that $t\text{-statistics} > t\text{-table}$, which means that hypothesis 2 which stated that the variable learning orientation has a positive effect on innovativeness supported by the confidence level of 95 percent.

Type of business operation mode of participatory communication moderate the relationship between market orientation with innovativeness ($t\text{-statistics}$: 1,691822) and learning orientation relationship on innovativeness ($t\text{-statistics}$ = 1,687062). This means that the participatory communication moderate the relationship between market and learning orientation relationship on innovativeness. In other hand, moderating effect of delegation of authority on relationship between market orientation on innovativeness ($t\text{-statistics}$: 1,388402) and learning orientation on innovativeness ($t\text{-statistics}$ = 1,306294). This means that delegation of authority not moderate relationship between market orientation and learning orientation on innovativeness.

Table 5. Hypothesis testing

Variable correlations	Original Sample	T Statistics	Description
Learning Orientation -> Innovativeness	0,343071	2,369576	Supported
Market Orientation -> Innovativeness	0,385133	2,353834	Supported
Market Orientation -> Learning Orientation	0,709506	9,572004	Supported
Moderating effect			
Market Orientation * Participative -> Innovativeness	0,219917	2,684604	Supported
Learning Orientation * Participative -> Innovativeness	0,150137	3,163413	Supported
Learning Orientation * delegation of authority -> Innovativeness	0,483133	1,046396	Not Supported
Market Orientation * delegation of authority -> Innovativeness	0,774079	1,075561	Not Supported

4. Discussion

This study found that market orientation has a positive effect on learning orientation. This means that the greater the market orientation is conducted by SMEs, then the level of learning orientation of SMEs is greater. SMEs that have a market orientation include customer orientation, competitor and inter-functional coordination will encourage SMEs to continue increasing willingness to continue learning in attempt to follow the various market demands and business competitions. These findings support Farrell's research (2000) and Slater and Narver (1995) stated that market-oriented organization will provide the cultural framework from learning orientation that can be developed by the companies. Besides, this study also supports the finding of Zhang et al., (2004) which stated that the orientation of learning becomes one of the determining factors of market orientation and innovativeness. This study was also in line with the opinion of Baker and Sinkula (1999) which suggest that market orientation will facilitate adaptive learning for the firm. Indirectly, this study consistent with the Bel et al., (2002) and Baker and Sinkula (2002) stated that organizational learning and market orientation are interdependent and mutually synergistic.

The results showed that there is a positive influence on market orientation to innovativeness. This means that the greater attention to the orientation of the SMEs market, the firm innovativeness level will increase. This finding supports the Jaworski and Kohli (1993) who suggested that market orientation is essentially linked with creating something new or different in response to market conditions. This study also supports the research of Deshpande et al., (1993) who found the effect of market orientation on firm innovation. In addition, research is also in line with Kitchell (1995) which stated that proactive information retrieval by the organization will

produce organization's innovativeness.

The results showed that there was a positive influence on learning orientation variable to innovativeness. It means that the better the learning orientation, then innovativeness also better. The results of this study support the finding of Dickson (1996) which stated that a good learning environment within the organization will increase the effectiveness of the usage of all firm resources, including activities that accompany market orientation and innovation. In addition, this study also supported the research conducted by Mullen and Lyles (1993) which stated that the orientation on organizational learning in a sustainable manner will improve the efficiency and effectiveness of the firm's innovation activities. Accompany this research was also consistent with Rahab and Sudjono's research (2012) which stated that companies with high levels of learning orientation will encourage employees to innovate. This study also supported the research of Hurley and Hult (1998) which stated that learning orientation will guide the Firm's development to its superior performance.

Relating to the role of the operating mode as a moderating variable, the results of data analysis (Table 6) shows that business operation mode of participatory communication type had a significant effect in either moderating the relationship between market orientation to innovativeness or in relationship of learning orientation to innovativeness. This means that the higher the participatory communication which is run by SMEs will strengthen the relationship between market orientation and learning orientation on innovativeness. SMEs which apply participatory communication will facilitate the implementation of market orientation and learning in order to encourage organization innovativeness. Participatory communication plays a role in motivating employees / members to internalize the culture of market orientation and lead to the motivation to keep learning so that organization innovativeness will be created.

On the other hand, the mode of business operation in form of delegating authority had no effect in either moderate the relationship between market orientation to innovativeness or relationship between learning orientation to innovativeness. This showed that the delegation of authority has not been effectively strengthen the relationship between market orientation to innovativeness and relationship between learning orientation to innovativeness. This could be explained because basically SMEs is an organizational entity that still relies heavily on the figure of the owner. Dominance of the owners / top management of Small and Medium Enterprises in the decision making process for SMEs is very prominent. System of delegation of authority was rarely done since the majority of SMEs do not have a good system in business management.

5. Conclusions and Implications

This study focuses on two main issues; first, the relationship between market orientation, learning orientation, and business operation mode and innovativeness. Second, the effect of mode of business operation in mediating the relationship between market orientation, learning orientation, and business innovation. The results showed that SMEs' innovativeness are influenced by market orientation and learning orientation. Learning orientation in SMEs would drive the market orientation owned by Small and Medium Enterprises toward innovativeness. Relating to the role of business operation mode as a moderating variable, this study suggested that the type of operating mode of participatory communication plays an important role in moderating the relationship between market orientation, learning orientation, and business innovation.

The findings of this study provided some implications for both managerial and academic implications. The managerial implications include: First, the linkage between market orientation, learning orientation, and innovation has been recognized as the main variable that plays a vital role in driving business performance. Based on these findings, it is recommended to the leaders / managers in SMEs that it is necessary to align the pattern of the firm's operations in relation to market orientation, learning orientation and innovation.

Second, the mode of business operation had directly influence on corporate innovation. Type of operation mode selected by the firm will have an impact on the firm's innovativeness. Therefore, the selection of operating mode selected/ implemented by the management of SMEs would have an impact on the level of

Firm's innovation they lead. Therefore, it appears that companies needed to focus their efforts on promoting business innovation through various means including market orientation, learning orientation, and participation and supporting the delegation of authority within the organization. Without the proper mode of business operation, an attempt to direct organization's innovativeness will face many problems

Academic implications of this study is, first, to improve the efficiency and effectiveness of the activities of SMEs, market orientation and learning orientation are important factors for improving innovativeness of SMEs. The results suggested that market orientation, learning orientation and innovation should be integrated into the management of SMEs. Second, the mode of business operation directly affects the innovativeness and participatory communication patterns moderate the relationship between market orientation, learning orientation and innovativeness. Contingency compatibility between mode of business operation and the construct will encourage SMEs' innovativeness, which in turn affects the performance.

This study had several limitations; first, this study adopted a cross-sectional study design to observe the Firm at one point in time, so the findings can not explain how the processes of innovativeness development occur in SMEs. Then, time constraints and availability of data, since a longitudinal study was unable to use longitudinal study design in this study. Second, this study examined the role of business operation mode as moderating factor in the relation between market and learning orientation in SMEs' innovativeness. Several other factors may be possible to have significant effects on the relationship. In the future research, it is possible to evaluate other contingency factors such as organizational structure, pressures on business environment and the Firm's age in moderating the relationship between market orientation and learning in SMEs' innovativeness. Third, the sample size limitations, this study could not compare the model of research on different types of SMEs between the manufacturing and service sectors. Further research will be valuable if it can do a comparison on the model of innovativeness on SMEs at manufacturing sector and service sector.

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References

- Argyris, C. and Schon, D.A. (1978). *Organizational Learning: A Theory of Action Perspective*, Addison-Wesley Pub. Co, Reading, MA.
- Baker, W.E. and Sinkula, J.M. (1999). The synergistic effect of market orientation and learning organization and organizational performance. *Journal of the Academy of Marketing Science*, Vol. 27 No. 3, pp. 411-27.
- Baker, W.E. and Sinkula, J.M. (2002). Market orientation, learning orientation and product innovation: delving into the organization's black box. *Journal of Market-Focused Management*, Vol. 5 No. 1, pp. 5-23.
- Bell, S.J., Whitwell, G.J. and Lukas, B.A. (2002). Schools of thought in organizational learning. *Journal of the Academy of Marketing Science*, Vol. 30 No. 1, pp. 70-86.
- Benito, O 'scar Gonza'lez; Benito, Javier Gonza'lez and Gallego, Pablo A. Muoz. (2009). Role of entrepreneurship and market orientation in firms' success, *European Journal of Marketing*, Vol. 43 No. 3/4, 2009 pp. 500-522
- Bettis, R.A. and Prahalad, C.K. (1995). The dominant logic: retrospective and extension. *Strategic Management Journal*, Vol. 16 No. 1, pp. 5-14.
- Bose, R. (2004). Knowledge management metrics. *Industrial Management & Data Systems*, Vol. 104 No. 6, pp. 457-68.
- Brown, S.L. and Eisenhardt, K.M. (1995). Product development: past research, present findings, and future directions. *The Academy of Management Review*, Vol. 20 No. 2, pp. 343-78.
- Calantone, R.J., Cavusgil, S.T. and Zhao, Y. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial Marketing Management*, Vol. 31 No. 6, p. 515.
- Cohen, W.M. and Levinthal, D.A. (1990). Absorptive capacity: a new perspective on learning and innovation. *Administrative Science Quarterly*, Vol. 35 No. 1, pp. 128-52.
- Cooper, D.R., and Schlinder, P.S. (2003). *Business Research Methods*, 8th ed. New York: Mc Graw Hill Book Co.
- Cummings, L. (1965). Organizational climates for creativity. *Academy of Management Journal*, Vol. 8 No. 3, pp. 220-7.
- Damanpour, F. (1991). Organizational innovation: a meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, Vol. 34 No. 3, pp. 555-90.
- Damanpour, F. and Evan, W.M. (1984). Organizational innovation and performance: the problem of 'organizational lag. *Administrative*

- Science Quarterly, Vol. 29 No. 3, pp. 392-409.
- Day, G.S. (1994). The capabilities of market-driven organizations. *Journal of Marketing*, Vol. 58 No. 4, pp. 37-52.
- Deshpande, R. (1999). 'Foreseeing' marketing. *Journal of Marketing*, Vol. 63, pp. 164-7.
- Deshpande, R., Farley, J.U. and Webster, F.E.J. (1993). Corporate culture, customer orientation, and innovativeness. *Journal of Marketing*, Vol. 57 No. 1, pp. 23-7.
- Dickson, P.R. (1996). The static and dynamic mechanics of competition: a comment on Hunt and Morgan's comparative advantage theory. *Journal of Marketing*, Vol. 60 No. 4, pp. 102-6.
- Dodgson, M. (1993). Organizational learning: a review of some literatures. *Organization Studies*, Vol. 14 No. 3, pp. 375-94.
- Dougherty, D. (1992). A practice-centered model of organizational renewal through product innovation. *Strategic Management Journal*, Vol. 13 No. 8, pp. 77-92.
- Farrell, M.A. (2000). Developing a market-oriented learning organisation. *Australian Journal of Management*, Vol. 25 No. 2, pp. 201-23.
- Fiol, C.M. and Lyles, M.A. (1985). Organizational learning. *Academy of Management Review*, Vol. 10 No. 4, pp. 803-13.
- Gephart, M.A., Marsick, V.J., Van Buren, M.E. and Spiro, M.S. (1993). 'Learning organizations come alive', *Training & Development*, Vol. 50 No. 12, pp. 34-45.
- Geus, A.P.D. (1998). Why some companies live to tell about change. *The Journal for Quality and Participation*, Vol. 21 No. 4, pp. 17-21.
- Ghozali, Imam. (2006). "Structural Equation Modeling. Metode Alternatif dengan Partial Least Square". UNDIP. Semarang.
- Han, J.K., Kim, N. and Srivastava, R.K. (1998). Market orientation and organizational performance: is innovation a missing link?. *Journal of Marketing*, Vol. 62 No. 4, pp. 30-45.
- Hartono, Jogiyanto. 2004. *Metodologi Penelitian Bisnis. Salah Kaprah dan Pengalaman-Pengalaman*. BPFE, Yogyakarta.
- Hardley, F. and Mavondo, F. (2000). The relationship between learning orientation, market orientation and organisational performance", paper presented at the Australian & New Zealand Marketing Academy Conference, Queensland, Australia.
- Henard, D.H. and Szymanski, D.M. (2001). Why some new products are more successful than others. *Journal of Marketing Research*, Vol. 38 No. 3, pp. 362-75.
- Hult, G.T.M., Hurley, R.F. and Knight, G.A. (2004). Innovativeness: its antecedents and impact on business performance. *Industrial Marketing Management*, Vol. 33 No. 5, pp. 429-38.
- Hurley, R.F. and Hult, G.T.M. (1998). Innovation, market orientation, and organizational learning: an integration and empirical examination. *Journal of Marketing*, Vol. 62 No. 3, pp. 42-54.
- Jaworski, B., Kohli, A.K. and Sahay, A. (2000). Market-driven versus driving markets. *Journal of the Academy of Marketing Science*, Vol. 28 No. 1, pp. 45-54.
- Jaworski, B.J. and Kohli, A.K. (1993). Market orientation: antecedents and consequences. *Journal of Marketing*, Vol. 57 No. 3, pp. 53-70.
- Kambil, A., Eselius, E.D. and Monteiro, K.A. (2000). Fast venturing: the quick way to start web businesses. *Sloan Management Review*, Vol. 41 No. 4, pp. 55-67.
- Keskin, Halit. (2006). Market orientation, learning orientation, and innovation capabilities in SMEs: An extended model. *European Journal of Innovation Management*, Vol. 9 No. 4, 2006, pp. 396-417
- Kim, W.C. and Mauborgne, R. (1999). Strategy, value innovation, and the knowledge economy. *Sloan Management Review*, Vol. 40 No. 3, pp. 41-54.
- Kitchell, S. (1995). Corporate culture, environmental adaptation, and innovation adoption: a qualitative/quantitative approach. *Journal of the Academy of Marketing Science*, Vol. 23 No. 3, pp. 195-205.
- Kohli, A.K. and Jaworski, B.J. (1990). Market orientation: the construct, research propositions, and managerial implications. *Journal of Marketing*, Vol. 54 No. 2, pp. 1-18.
- Kohli, A.K., Jaworski, B.J. and Kumar, A. (1993). MARKOR: a measure of market orientation. *Journal of Marketing Research*, Vol. 30 No. 4, pp. 467-77.
- Lado, N. and Maydeu-Olivares, A. (2001). "Exploring the link between market orientation and innovation in the European and US insurance markets", *International Marketing Review*, Vol. 18 No. 2, pp. 130-44.
- Lee, Tien-Shang and Tsai, Hsin-Ju. (2005). The effects of business operation mode on market orientation, learning orientation and innovativeness, *Industrial Management & Data Systems*, Vol. 105 No. 3, 2005 pp. 325-348.
- Lin, Chien-Huang ; Ching-Huai Peng; Danny T. Kao. (2008). The innovativeness effect of market orientation and learning orientation on business performance, *International Journal of Manpower*, Vol. 29 No. 8, pp. 752-772
- Lin, Chien-Huang; Peng, Ching-Huai, Kao, Danny T. (2008). The innovativeness effect of market orientation and learning orientation on business performance. *International Journal of Manpower*, Vol. 29 No. 8, 2008, pp. 752-772
- Mascitelli, R. (2000). From experience: harnessing tacit knowledge to achieve breakthrough innovation. *Journal of Product Innovation Management*, Vol. 17 No. 3, pp. 179-93.
- McGuinness, Tony and Robert E. Morgan. (2005). The effect of market and learning orientation on strategy dynamics: The contributing effect of organisational change capability, *European Journal of Marketing*, Vol. 39 No. 11/12, 2005 pp. 1306-1326
- Mullen, T.P. and Lyles, M.A. (1993). Toward improving management development's contribution to organizational learning. *Human Resource Planning*, Vol. 16 No. 2, pp. 35-49.
- Narver, J.C. and Slater, S.F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, Vol. 54 No. 4, pp. 20-35.
- Neely, A., Filippini, R., Forza, C., Vinelli, A. and Hii, J. (2001), "A framework for analysing business performance, firm innovation and related contextual factors: perceptions of managers and policy makers in two European regions", *Integrated Manufacturing Systems*, Vol. 12 No. 2, pp. 114-24.

- Pelham, A.M. (2000). Market orientation and other potential influences on performance in small and medium-sized manufacturing firms. *Journal of Small Business Management*, Vol. 38 No. 1, pp. 48-67.
- Pierce, J.L. and Delbecq, A.L. (1977). Organization structure, individual attitudes and innovation. *Academy of Management Review*, Vol. 2 No. 1, p. 27.
- Rahab dan Sudjono (2012) Pengembangan Kapabilitas Keinovasian IKM Berbasis Pada Orientasi Kewirausahaan Dan Pembelajaran Organisasional. *Jurnal Inovasi & Kewirausahaan*, Vol. 01 No. 01.
- Scott, S.G. and Bruce, R.A. (1994). Determinants of innovative behavior: a path model of individual innovation in the workplace. *Academy of Management Journal*, Vol. 37 No. 3, p. 580.
- Senge, P.M. (1990). The leader's new work: building learning organizations. *Sloan Management Review*, Vol. 32 No. 1, pp. 7-24.
- Sinkula, J.M. (1994). Market information processing and organizational learning. *Journal of Marketing*, Vol. 58 No. 1, pp. 35-45.
- Slater, S.F. and Narver, J.C. (1994). Does competitive environment moderate the market orientation-performance relationship?. *Journal of Marketing*, Vol. 58 No. 1, pp. 46-55.
- Slater, S.F. and Narver, J.C. (1995). Market orientation and the learning organization. *Journal of Marketing*, Vol. 59 No. 3, pp. 63-74.
- Slater, S.F. and Narver, J.C. (1998). Customer-led and market-oriented: let's not confuse the two. *Strategic Management Journal*, Vol. 19 No. 10, pp. 1001-6.
- Slater, S.F. and Narver, J.C. (1999). Research notes and communications: market-oriented is more than being customer-led. *Strategic Management Journal*, Vol. 20 No. 12, pp. 1165-1168.
- Suliyanto dan Rahab.(2012). The Role of Market Orientation and Learning Orientation in Improving SMEs Performance, *Asian Social Science*, Vol. 8, No. 1.
- Thompson, V.A. (1965). Bureaucracy and innovation. *Administrative Science Quarterly*, Vol. 10 No. 1, pp. 1-20.
- Van De Ven, A.H. (1986). Central problems in the management of innovation. *Management Science*, Vol. 32 No. 5, pp. 590-607.
- Verhees, F.J.H.M. and Meulenbergh, M.T.G. (2004). "Market orientation, innovativeness, product innovation, and performance in small firms. *Journal of Small Business Management*, Vol. 42 No. 2, pp. 134-54.
- Wang, C.L. and Ahmed, P.K. (2003). Organisational learning: a critical review. *The Learning Organization*, Vol. 10 No. 1, pp. 8-17.
- Weerawardena, J. and O'Cass, A. (2004). Exploring the characteristics of the market-driven firms and antecedents to sustained competitive advantage. *Industrial Marketing Management*, Vol. 33 No. 5, pp. 419-28.
- Wu, W-Y., Chiang, C-Y., Wu, Y-J. and Tu, H-J. (2004a). The influencing factors of commitment and business integration on supply chain management. *Industrial Management & Data Systems*, Vol. 104 No. 4, pp. 322-33.
- Wu, W-Y., Chou, C.H. and Wu, Y-J. (2004b). A study of strategy implementation as expressed through Sun Tzu's principles of war. *Industrial Management & Data Systems*, Vol. 104 No. 5, pp. 396-408.
- Zhang, Q., Lim, J-S. and Cao, M. (2004). Innovation-driven learning in new product development: a conceptual model. *Industrial Management & Data Systems*, Vol. 104 No. 3, pp. 252-61.